

AMENDMENT UNDER 37 CFR 1.111
U.S. APPLICATION NO. 10/691,222
ATTORNEY DOCKET NO. CA1216

REMARKS

Claims 18-24, 27-30, 48-54 and 57-64 have been examined on their merits.

Claims 25, 26, 55, 56 and 65-72 were withdrawn from consideration based on the Response to Restriction Requirement filed on February 9, 2005.

Claims 18-30 and 48-72 are all the claims presently pending in the application.

1. Claims 49-54, 57, 58 and 64 stand rejected under 35 U.S.C. § 112 (2nd para.) as allegedly being indefinite. Applicants traverse the § 112 (2nd para.) rejection of claims 49-54, 57, 58 and 64 for at least the reasons discussed below.

Applicants herein amend claims 49-54 and 57 so that they directly or indirectly depend from claim 48.

Applicants herein amend claim 58 to correct an antecedent basis error. Applicants have also amended claim 28 to remove a similar antecedent basis error.

Applicants herein amend the preamble of claim 64 to conform to its dependency from claim 48.

In view of the above, Applicants respectfully request that the Patent Office reconsider and withdraw the § 112 (2nd para.) rejection of claims 49-54, 57, 58 and 64.

AMENDMENT UNDER 37 CFR 1.111
U.S. APPLICATION NO. 10/691,222
ATTORNEY DOCKET NO. CA1216

2. Claims 18, 24, 27-30, 48, 54 and 57-64 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Nagasaka *et al.* (U.S. Patent No. 5,818,439). Applicants respectfully traverse the § 102(b) rejection of claims 18, 24, 27-30, 48, 54 and 57-64 for at least the reasons discussed below.

Nagasaka *et al.* fail to teach or suggest at least the computation of a similarity between a plurality of frames and a frame that precedes the plurality of frames, as recited in claim 18. As cited by the Patent Office, Nagasaka *et al.* disclose, *inter alia*, that the change between shots is detected by capturing the entered video into each frame computing device and obtaining the similarity in image features between the current frame and the immediately preceding frame to determine whether a shot change is taking place. *See, e.g.*, col. 8, lines 13-18 of Nagasaka *et al.* In contrast, the present invention, as recited in claim 18, claims that the similarity computation is performed between a preceding frame and the plurality of frames that immediately follow. This is in contrast to Nagasaka *et al.*'s method of serially parsing the video frames one at a time to determine if a shot change has occurred.

Based on at least the foregoing reasons, Applicants submit that claim 18 is allowable over Nagasaka *et al.*, and further submit that claims 24, 27-30, 61 and 62 are allowable as well, at least by virtue of their dependency from claim 18. Applicants respectfully request that the Patent Office reconsider and withdraw the § 102(b) rejection of claims 18, 24, 27-30, 61 and 62.

With respect to independent claim 48, Applicants submits that claim 48 is allowable as well for at least reasons analogous to those discussed above with respect to claim 18. Applicants further submit that claims 54, 57-60, 63 and 64 are allowable as well, at least by virtue of their

AMENDMENT UNDER 37 CFR 1.111
U.S. APPLICATION NO. 10/691,222
ATTORNEY DOCKET NO. CA1216

dependency from claim 48. Applicants respectfully request that the Patent Office reconsider and withdraw the § 102(b) rejection of claims 48, 54, 57-60, 63 and 64.

3. Claims 19-23 and 49-53 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nagasaka *et al.* in further view of Lim (U.S. Patent No. 6,574,378). Applicants respectfully traverse the § 103(a) rejection of claims 19-23 and 49-53 for at least the reasons discussed below.

The Patent Office acknowledges that Nagasaka *et al.* fail to teach or suggest that the similarity is computed using a refined feature space, and the refined feature space is created using singular value decomposition. The Patent Office alleges that Lim provides the necessary disclosure to overcome the acknowledged deficiencies of Nagasaka *et al.*

Claims 19-23 depend from claim 18, and therefore include all the recitations of claim 18 by virtue of their dependency. The combination of Nagasaka *et al.* and Lim fails to teach or suggest at least the computation of a similarity between a plurality of frames and a frame that precedes the plurality of frames, as recited in claim 18. As discussed above, the computation of similarities between frames is performed in a much different manner than the serial parsing of frames as disclosed by Nagasaka *et al.* Lim has no disclosure regarding the computation of similarity between a frame and a plurality of frames that overcomes the deficiencies of Nagasaka *et al.* with respect to the method recited in claim 18, and included via dependency in claims 19-23. Thus, Applicants submit that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness.

AMENDMENT UNDER 37 CFR 1.111
U.S. APPLICATION NO. 10/691,222
ATTORNEY DOCKET NO. CA1216

In addition, since neither Nagasaka *et al.* nor Lim disclose the computation of similarity between a frame and a plurality of frames as recited in claims 19-23, Applicants submit that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness.

Based on at least the foregoing reasons, Applicants submit that claims 19-23 are allowable over the combination of Nagaska *et al.* and Lim, and respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claims 19-23.

With respect to claims 49-53, these claims depend from claim 48, and therefore include all the recitations of claim 48 by virtue of their dependency. The combination of Nagasaka *et al.* and Lim fails to teach or suggest at least the computation of a similarity between a plurality of frames and a frame that precedes the plurality of frames, as recited in claim 48. As discussed above, the computation of similarities between frames is performed in a much different manner than the serial parsing of frames as disclosed by Nagasaka *et al.* Lim has no disclosure regarding the computation of similarity between a frame and a plurality of frames that overcomes the deficiencies of Nagasaka *et al.* with respect to the method recited in claim 48, and included via dependency in claims 49-53. Thus, Applicants submit that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness.

In addition, since neither Nagasaka *et al.* nor Lim disclose the computation of similarity between a frame and a plurality of frames as recited in claims 49-53, Applicants submit that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness.

AMENDMENT UNDER 37 CFR 1.111
U.S. APPLICATION NO. 10/691,222
ATTORNEY DOCKET NO. CA1216

Based on at least the foregoing reasons, Applicants submit that claims 49-53 are allowable over the combination of Nagaska *et al.* and Lim, and respectfully request that the Patent Office reconsider and withdraw the § 103(a) rejection of claims 49-53.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Paul J. Wilson
Registration No. 45,879

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: September 14, 2005